

Applying An Analytical Hierarchy Process For Strategic Decision-Making of Business Solution To Address Sales Decline In SMEs

(Case Study: TB. Buyung Mas Putri)

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ABSTRACT

This research addresses the sales decline experienced by TB. Buyung Mas Putri, a retail building materials store in Indramayu, caused by inefficiencies in manual processes, the absence of digital marketing and e-commerce platforms, and disorganized financial reporting. Coupled with increasing market competition, these challenges have significantly impacted sales performance. However, the company's strategic location, loyal customer base, and diverse product offerings present opportunities for recovery and sustainable growth. To address these issues, the study employs a combination of analytical methods: SWOT analysis to identify internal and external factors, TOWS matrix to develop actionable strategies, Kepner-Tregoe decision-making framework to prioritize solutions, Analytical Hierarchy Process (AHP) to evaluate and rank strategies, and Fishbone analysis to uncover the root causes of operational inefficiencies. The findings highlight four key strategies: automating inventory management to reduce stockouts and errors, implementing financial management tools to improve reporting and decision-making, collaborating with contractors to ensure steady demand and long-term partnerships, and adopting digital marketing and e-commerce platforms to expand market reach by implementing these strategies. TB. Buyung Mas Putri can enhance operational efficiency, restore sales growth, and establish a foundation for long-term success in a competitive retail market..

ABSTRAK

Penelitian ini membahas penurunan penjualan yang dialami TB. Buyung Mas Putri, sebuah toko ritel bahan bangunan di Indramayu, yang disebabkan oleh inefisiensi dalam proses manual, ketiadaan pemasaran digital dan platform e-commerce, serta pelaporan keuangan yang tidak terorganisir. Ditambah dengan meningkatnya persaingan pasar, tantangan ini secara signifikan memengaruhi kinerja penjualan. Namun, lokasi strategis, basis pelanggan yang loyal, dan keragaman produk yang ditawarkan perusahaan menjadi peluang untuk pemulihan dan pertumbuhan berkelanjutan. Untuk mengatasi permasalahan ini, penelitian ini menggunakan kombinasi metode analisis: analisis SWOT untuk mengidentifikasi faktor internal dan eksternal, matriks TOWS untuk mengembangkan strategi yang dapat ditindaklanjuti, kerangka pengambilan keputusan Kepner-Tregoe untuk memprioritaskan solusi, Analytical Hierarchy Process (AHP) untuk mengevaluasi dan memeringkat strategi, serta analisis Fishbone untuk mengungkap akar penyebab dari inefisiensi operasional. Hasil penelitian ini menyoroti empat strategi utama: mengotomatisasi manajemen inventaris untuk mengurangi kekurangan stok dan kesalahan pencatatan, menerapkan alat manajemen keuangan untuk meningkatkan pelaporan dan pengambilan keputusan, berkolaborasi dengan kontraktor guna memastikan permintaan yang stabil dan kemitraan jangka panjang, serta mengadopsi pemasaran digital dan platform e-commerce untuk memperluas jangkauan pasar. Dengan menerapkan strategi ini, TB. Buyung Mas Putri dapat meningkatkan efisiensi operasional, memulihkan pertumbuhan penjualan, dan membangun fondasi untuk kesuksesan jangka panjang dalam pasar ritel yang kompetitif.



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INTRODUCTION

Small and Medium Enterprises (SMEs) play a pivotal role in Indonesia's economic development by contributing significantly to job creation and regional economic growth. Despite their vital role, over 50% of SMEs rely on manual processes, causing operational inefficiencies and missed opportunities to optimize their processes for enhanced profitability (Shinozaki, 2022). One of the most affected sectors is traditional retail, particularly in the construction materials market, where increasing competition and shifting consumer preferences due to digitalization have disrupted conventional business models. TB. Buyung Mas Putri, a building material retailer located in Indramayu, exemplifies this issue. Between 2019 and 2023, the company experienced a sharp sales decline of approximately 33%, highlighting significant challenges in adapting to a rapidly evolving market. This decline can be attributed to the growing preference for online shopping among over 60% of consumers, substantially reducing foot traffic and demand for offline businesses – unfortunately, TB. Buyung Mas Putri needs to adopt an effective e-commerce platform or implement digital tools, leaving it unable to compete with technology-driven competitors that offer faster service, broader product variety, and lower prices (Adhi et al., 2020).

The primary cause of TB. Buyung Mas Putri's sales decline is multifaceted, stemming from internal inefficiencies and external competitive pressures. Competitors – whether online or offline – have successfully leveraged technology and innovation to attract customers, while traditional businesses like TB. Buyung Mas Putri remain stagnant. In competitive markets, innovation and adaptability are critical survival strategies (Kotler et al., 2016). However, the company has yet to explore comprehensive solutions that address internal challenges, such as operational inefficiencies, while leveraging digital transformation to remain competitive. Such approaches will enable Buyung Mas Putri to adapt quickly to changing market environments while remaining competitively positioned (Suhendra, 2017). This research aims to bridge that gap by identifying the root causes of the sales decline through Fishbone and Kepner-Tregoe analyses. Furthermore, the study integrates strategic tools like SWOT analysis, TOWS matrix, and Analytical Hierarchy Process (AHP) to develop and prioritize targeted solutions. These solutions mitigate the current sales decline and ensure sustainable business growth by optimizing operations and establishing a more substantial online presence. Addressing these challenges is critical, as the absence of an optimized workflow and a digital business model exacerbates the company's inability to meet evolving consumer demands in Indonesia's increasingly digital economy.

The Analytical Hierarchy Process (AHP) has emerged as a critical decision-making tool across various sectors, particularly for SMEs striving to address sales challenges and operational inefficiencies. Studies demonstrate that integrating AHP into strategic decision-making positively influences performance and prevents business failure by fostering entrepreneurial posture and adopting organic organizational structures (Saraiva et al., 2024). Additionally, methods combining Balanced Scorecard and interval-valued hesitant fuzzy DEMATEL have been successfully applied to enhance strategic management, providing a holistic perspective on organizational performance (Kalender et al., 2024). Recent studies have emphasized the role of AHP in addressing critical SME challenges, including financial risk assessment Alrawad et al. (2023) and prioritizing key entrepreneurial issues during the early stages of business development (Gopi & Subramoniam, 2024). For Indonesian SMEs adopting e-commerce,

approaches combining DEMATEL, ANP, and COPRAS have identified critical success factors and optimized strategic solutions (Bening et al., 2023). Moreover, through in-depth interviews and analytical indices, big data analytics have been applied to assess business vulnerability and evaluate the impact of crises, such as COVID-19, on SMEs (Caraka et al., 2023). These findings underline the importance of risk perception, technology adoption, and collaborative frameworks, such as the Penta-Helix model, in supporting SME resilience and growth.

Other studies showcase AHP's versatility in addressing various SME challenges. AHP has been applied to evaluate digital readiness (Anggraini & Pranggono, 2022), identify human error in maintenance management (Velmurugan et al., 2022), and support sustainable managerial decision-making (Stofkova et al., 2022). Methods combining AHP with Fuzzy logic, TOPSIS, and SWOT analysis have further enhanced its application, offering systematic prioritization and alternative evaluation (Velmurugan et al., 2022). In SMEs, AHP has also been utilized to prioritize development sectors, emphasizing human resources as a critical factor for business success (Raco et al., 2021). Additionally, Fuzzy AHP has evaluated SMEs' digitalization readiness, identifying transactional preparedness as a key component (Okfalisa et al., 2021). These studies collectively highlight AHP's effectiveness in managing risks, adopting technology, and addressing operational challenges.

Despite the growing body of research on the Analytical Hierarchy Process (AHP) and its application to SMEs, significant gaps still need to be addressed, particularly in addressing declining sales within traditional SMEs in the Indonesian context. Existing studies have primarily focused on isolated challenges such as financial risk assessment Alrawad et al. (2023), digital readiness Okfalisa et al. (2021), and business vulnerability analysis during crises (Caraka et al., 2023). While these studies have demonstrated the utility of AHP in specific domains, they often need a comprehensive, integrated approach that combines multiple analytical tools to develop structured, actionable strategies. For example, methodologies like SWOT, TOWS, Fishbone, and Kepner-Tregoe are seldom integrated with AHP to address internal inefficiencies and external pressures in a unified manner. Research on SMEs has primarily overlooked the construction materials sector, where challenges such as operational inefficiencies, digital transformation barriers, and increasing market competition significantly affect business performance—the unique problems traditional SMEs face, such as TB. Buyung Mas Putri requires a holistic and tailored strategy to reverse the downward sales trend. Current studies focus on broader applications of AHP without exploring its potential in addressing the interplay between internal operational workflows and external market dynamics. By identifying this gap, this study contributes to the literature by offering a novel framework that integrates AHP with other strategic tools, providing practical and systematic solutions for addressing sales decline and promoting sustainable growth in traditional SMEs.

This research introduces a novel strategic framework by integrating multiple analytical tools—Fishbone analysis, Kepner-Tregoe method, SWOT, TOWS matrix, and the Analytical Hierarchy Process (AHP)—to address TB's sales decline comprehensively. Buyung Mas Putri, a traditional SME in Indonesia's construction materials sector. Unlike previous studies that apply AHP in isolation or focus on narrow aspects such as financial risk or digital readiness (Alrawad et al., 2023; Okfalisa et al., 2021), this study bridges a significant gap by adopting a holistic approach that targets both internal inefficiencies and external market challenges. The research aligns business solutions with evolving consumer behaviors and competitive market demands

by systematically identifying the root causes of performance issues and prioritizing actionable strategies. The novelty of this study lies in its combination of qualitative and quantitative methods to analyze underlying problems while formulating and prioritizing targeted strategies using AHP. This approach enables TB. Buyung Mas Putri to tackle operational inefficiencies, embrace digital transformation and enhance its competitiveness through human resource development and business network expansion. The primary objective of the research is to reverse the company's sales decline by creating a strategic roadmap that integrates digital tools, operational optimization, and strategic collaborations.

Small and Medium Enterprises (SMEs) face many challenges, including sales decline and operational inefficiencies, which demand strategic frameworks for sustainable growth. These challenges are particularly evident in traditional businesses such as material construction stores, where competition, digital transformation, and inefficiencies exacerbate the difficulties of survival. Previous studies have offered various methods and tools to address these issues, highlighting the importance of structured decision-making, digital solutions, and integrated analytical approaches to overcome the unique challenges faced by SMEs. One widely adopted approach in strategic decision-making is the Analytical Hierarchy Process (AHP). Nisa (2024) employed AHP to evaluate strategic decision-making in material construction stores, showcasing its utility in prioritizing solutions and guiding businesses toward optimal decisions. The study demonstrated that AHP provides a structured framework to assess and compare multiple alternatives, which is particularly beneficial for businesses facing resource constraints, such as SMEs. This finding supports the relevance of AHP in addressing complex challenges in traditional retail sectors, where a structured prioritization process is needed to tackle sales decline effectively. In addition to AHP, SWOT analysis has been extensively used to identify internal and external factors influencing business performance. Badi'ati & Zulistiani (2023) emphasized the effectiveness of SWOT analysis in evaluating organizational strengths, weaknesses, opportunities, and threats. This approach provides a foundational understanding of the business environment and is a preliminary tool for formulating actionable strategies. For TB. Buyung Mas Putri, which operates in a dynamic and competitive market, SWOT analysis is particularly valuable in identifying internal inefficiencies and external market pressures contributing to sales decline. By systematically analyzing these factors, businesses can develop targeted strategies to leverage their strengths while addressing critical weaknesses and market challenges.

The role of digital transformation in supporting traditional businesses has also gained significant attention in recent studies. Fernando & Sarjono Putro (2023) investigated how digital transformation facilitates the expansion of traditional businesses through location selection using multi-criteria analysis. The study highlighted that integrating digital tools can enhance decision-making processes, streamline operations, and improve competitiveness in TB. Buyung Mas Putri, digital transformation represents a key opportunity to overcome operational inefficiencies and address consumers' growing preference for online shopping. By leveraging digital solutions, such as e-commerce platforms and digital marketing strategies, traditional businesses can expand their reach, attract new customers, and improve overall performance. This study leverages several analytical frameworks to address operational inefficiencies and pinpoint the root causes of business challenges. One key methodology is the Fishbone Diagram, developed by Ishikawa, which is widely used for root cause analysis. Wong et al. (2016)

explained that the Fishbone Diagram visually categorizes potential causes of a problem into key areas, such as People, Method, Machine, Measurement, Material, and Environment. This categorization allows businesses to systematically analyze and address the underlying factors contributing to performance issues in TB. Buyung Mas Putri, the Fishbone Diagram helps identify operational inefficiencies, such as outdated workflows, inadequate staff training, and limited technological infrastructure, collectively contributing to the company's declining sales. By understanding these root causes, businesses can implement targeted solutions to improve efficiency and competitiveness. In addition to the Fishbone Diagram, the Kepner-Tregoe (KT) method provides a structured approach to problem analysis by systematically identifying, prioritizing, and addressing issues. According to Markopoulos et al. (2022), the KT method is particularly effective in pinpointing actionable causes of business challenges, making it an ideal tool for analyzing sales decline at TB. Buyung Mas Putri. The KT method enables businesses to differentiate between primary and secondary causes of performance issues, ensuring that resources are allocated to address the most critical problems. This structured problem-solving approach complements the Fishbone Diagram, providing a comprehensive understanding of the factors contributing to sales decline and guiding the development of practical solutions. While SWOT analysis is a foundational tool for understanding internal and external factors, the TOWS matrix extends these insights into actionable strategies. Benzaghta et al. (2021) highlighted that the TOWS matrix enhances strategic planning by aligning organizational strengths and weaknesses with external opportunities and threats. Businesses can develop internally feasible and externally relevant strategies by systematically analyzing these factors. For TB. Buyung Mas Putri, integrating SWOT and TOWS analyses provides a structured framework for addressing operational inefficiencies and market challenges. This combination ensures that strategies are realistic and aligned with the company's objectives.

The Analytical Hierarchy Process (AHP), introduced by Saaty, further strengthens the decision-making process by providing a systematic approach to prioritizing strategies. AHP uses pairwise comparisons to evaluate the relative importance of different criteria and alternatives, enabling businesses to make informed decisions based on quantitative analysis. Fernando and Sarjono Putro (2023) emphasized the effectiveness of AHP in aligning strategic decisions with organizational goals, particularly in competitive and resource-constrained environments. By integrating AHP with SWOT and TOWS analyses, businesses can systematically evaluate and prioritize strategic alternatives to address their challenges in the case of TB. Buyung Mas Putri, AHP ensures that the proposed strategies—such as digital transformation, operational optimization, and business network expansion—are prioritized based on their potential impact and feasibility. Furthermore, broader strategic frameworks have explored the role of hierarchical processes and regional economic improvements in enhancing business performance. Soamole & Kotib (2024) examined how strategic decision-making processes can leverage organizational strengths and address operational challenges in competitive markets. Their findings provide valuable insights for this study's approach, which combines multiple analytical tools to develop a holistic and actionable strategic framework for TB. Buyung Mas Putri. By integrating these methodologies, the study addresses internal inefficiencies and external market pressures, ensuring that the proposed strategies are comprehensive and sustainable.

The reviewed literature highlights several key methodologies and their relevance to strategic decision-making for businesses like TB. Buyung Mas Putri. Emphasizes the use of the Analytical Hierarchy Process (AHP) for ranking and prioritizing strategies systematically, aligning with this thesis's objective to ensure decision-making is aligned with organizational goals (Fernando & Sarjono Putro, 2023). Meanwhile, explore broader strategic frameworks, focusing on hierarchical processes and regional economic improvements, which inform this thesis's approach to leveraging strengths and addressing operational challenges in a competitive market (Soamole & Kotib, 2024). Collectively, these studies provide a strong foundation for the integrated methodology used in this thesis, combining SWOT, AHP, and other strategic tools to address TB's sales decline and operational inefficiencies. Buyung Mas Putri while identifying opportunities for sustainable growth.

RESEARCH METHODS

This research employs a mixed-methods design, combining qualitative and quantitative approaches to explore the sales decline at TB. Buyung Mas Putri. Data sources consist of primary data collected through interviews, questionnaires, and observations, alongside secondary data derived from financial reports and industry studies. Purposive sampling was used to select respondents, including the store owner, manager, and external stakeholders like competitors and industry experts. Data collection involved semi-structured interviews for qualitative insights, structured questionnaires for quantitative data, and direct observations to identify inefficiencies. Analytical methods applied include the Fishbone Diagram for categorizing root causes, Kepner-Tregoe Analysis for prioritizing issues, SWOT and TOWS Analysis for strategy formulation, and Analytical Hierarchy Process (AHP) for ranking strategies. These methods provide a systematic approach to identifying challenges, prioritizing solutions, and offering actionable recommendations for improving sales performance and sustaining business growth.

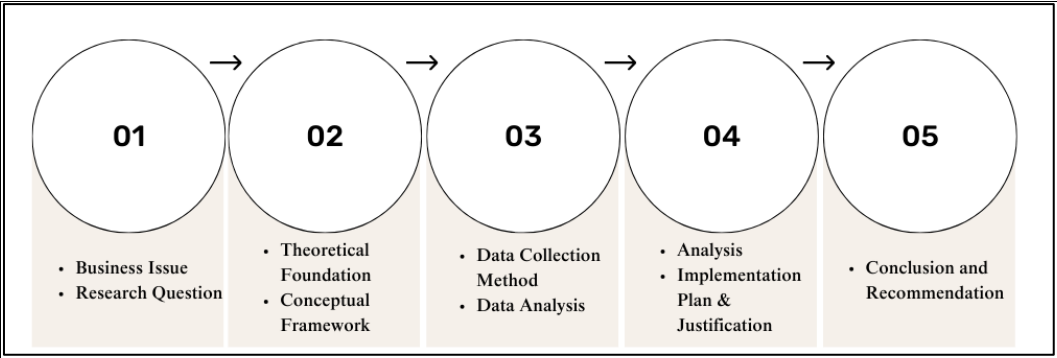


Figure 2. Research Design
Source: Author, 2024

Research Design

This study employs a mixed-methods research design, integrating qualitative and quantitative approaches to examine TB's sales decline comprehensively. Buyung Mas Putri. By combining these approaches, the research ensures that both in-depth insights and measurable quantitative data contribute to a well-rounded and strategic analysis.

Data Sources and Collection Techniques

The study draws on primary data and secondary data. Primary data is collected through semi-structured interviews, structured questionnaires, and direct observations. Using purposive sampling, respondents include the store owner, manager, competitors, and industry experts to ensure diverse perspectives. Semi-structured interviews capture qualitative insights related to operational inefficiencies and strategic gaps, while structured questionnaires collect quantitative data on customer perceptions, sales patterns, and priorities for improvement. Direct observations further identify workflow, inventory management, and customer service inefficiencies. Secondary data, including financial reports and industry studies, provides additional context on market trends and historical performance, supporting a robust understanding of TB. Buyung Mas Putri's challenges.

Analytical Methods

Several analytical tools are applied systematically to analyze the data. The Fishbone Diagram identifies the root causes of sales decline, categorizing them into People, Method, Machine, Measurement, Material, and Environment. The Kepner-Tregoe Analysis prioritizes these root causes, ensuring the most critical issues are addressed first. The SWOT Analysis evaluates internal strengths and weaknesses, external opportunities, and threats for strategy formulation. The insights are further developed using the TOWS Matrix, translating into actionable strategies. Finally, the Analytical Hierarchy Process (AHP) ranks these strategies based on their feasibility, impact, and alignment with business goals.

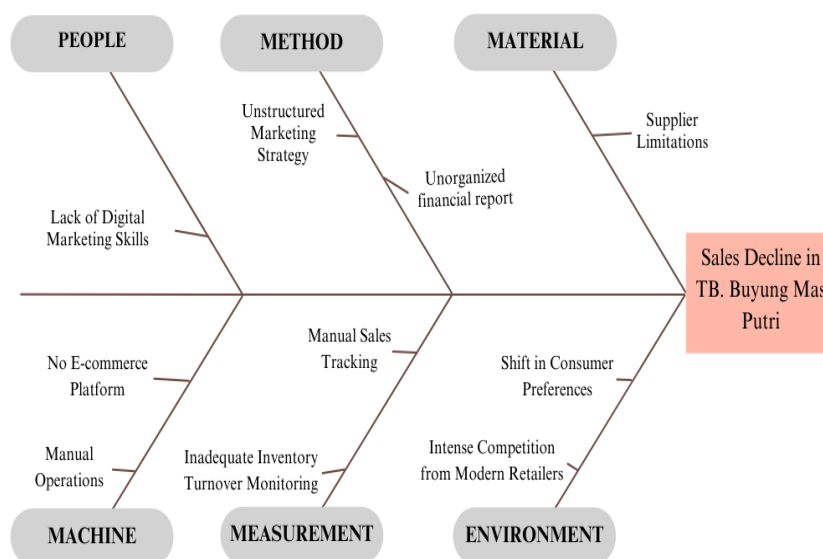


Figure 3. Fishbone diagram of sales decline in TB. Buyung Mas Putri

Source: Author, 2024

RESULTS AND DISCUSSION

The strategic prioritization process integrates SWOT and TOWS analysis to identify actionable strategies. SWOT analysis highlights internal strengths like strong customer loyalty and diverse product offerings, contrasted with weaknesses like disorganized financial reporting. TOWS analysis translates these findings into strategies, as detailed in Table 1.

Table 1. SWOT and TOWS matrix

TOWS MATRIX	<i>Strenghts (S)</i> <ul style="list-style-type: none"> • Strategic location (S1) • Strong customer loyalty (S2) • Have many variety of product (S3) • Offers a return procedure facility on several product (S4) 	<i>Weakness (W):</i> <ul style="list-style-type: none"> • Operational inefficiencies due to manual processes (W1) • No digital marketing activities or online store (W2) • Unorganized financial report (W3)
<i>Opportunities (O):</i> <ul style="list-style-type: none"> • Consumer shift toward convenience and online shopping (O1) • Growing demand for building materials in infrastructure projects (O2) • Government support for MSMEs in retail sectors (O3) • Development over technology (O4) • High demand in cement product (O5) 	<i>SO Strategy:</i> <ul style="list-style-type: none"> • Update new products to increase the number of product varieties (SO1) • Expand market by being a distributor of cement product (SO2) • Collaborate with contractor (SO3) 	<i>WO Strategy:</i> <ul style="list-style-type: none"> • Automation in Inventory Management (WO1) • Utilizing e-commerce and social media platforms (WO2) • Improve financial reporting (WO3)
<i>Threats (T):</i> <ul style="list-style-type: none"> • Emerging new competitor (T1) • Customers often negotiate the price (T2) • Price war with competitor (T3) • Competitors are better doing promotion (T4) 	<i>ST Strategy:</i> <ul style="list-style-type: none"> • Enhance in-store experience and service to differentiate from competitors (ST1) • Adjusts the pricing strategy to counter price wars from competitors (ST2) 	<i>WT Strategy:</i> <ul style="list-style-type: none"> • Implement Financial Management Tools (WT1) • Make promotion and discount for online customer (WT2)

Source: Author, 2024

Based on the results of an in-depth investigation into the criteria and sub-criteria relevant to addressing the sales decline at TB. Buyung Mas Putri, a hierarchical framework was developed, as illustrated in figure 4.

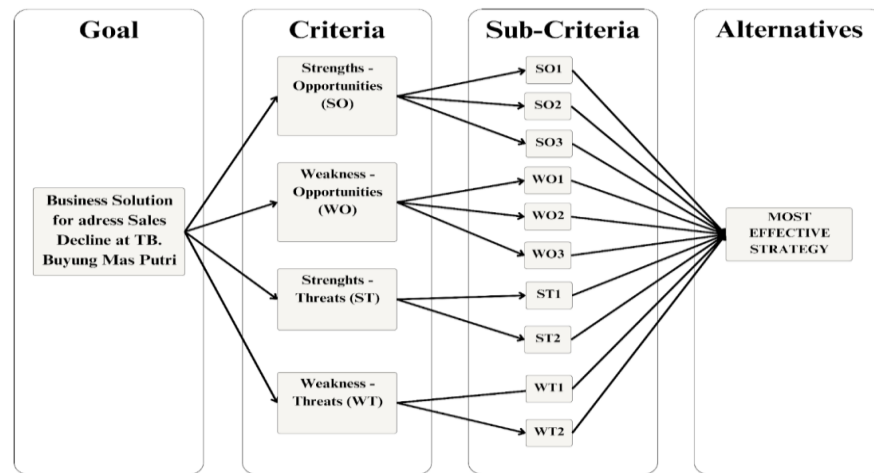


Figure 4. AHP hierarchy of selecting most effective strategy

Source: Author, 2024

The AHP framework prioritizes strategies to address the decline in sales and improve business performance. It consists of four components. The goal is to effectively identify and rank strategies for reversing the sales decline. The criteria are grouped into strategic categories, including SO (leveraging strengths and opportunities), WO (overcoming weaknesses through opportunities), ST (mitigating threats using strengths), and WT (reducing weaknesses to avoid threats), as outlined in the TOWS Matrix. These criteria guide the analysis and decision-making process. Sub-criteria consist of actionable strategies derived from the TOWS Matrix, demonstrating their alignment with the broader goals. Finally, alternative implementation strategies are evaluated to identify the most effective solutions. This structured hierarchy provides a clear and systematic approach to resolving challenges and achieving sustainable growth. The pairwise comparison data in the criteria section is analyzed at bpmmsg.com. The visualization of this produced data is shown in Figure 5.

Cat		Priority	Rank	(+)	(-)
1	SO	29.3%	2	6.7%	6.7%
2	WO	41.5%	1	11.3%	11.3%
3	ST	10.7%	4	2.0%	2.0%
4	WT	18.5%	3	3.0%	3.0%

Number of comparisons = 6
Consistency Ratio CR = 2.6%

Figure 5. Pairwise Comparison result for criteria

Source: bpmmsg.com, 2024

In the priority analysis of four strategy categories, the WO (Weaknesses-Opportunities) strategy ranks highest with a weight of 41.5%, focusing on leveraging internal weaknesses with external opportunities. The SO (Strengths-Opportunities) strategy follows with 29.3%, emphasizing using internal strengths to capitalize on external opportunities. The WT (Weaknesses-Threats) strategy ranks third with 18.5%, and the ST (Strengths-Threats) strategy is last with 10.7%. The analysis has a consistency ratio of 2.6%, well below the 10% threshold, confirming the validity of the calculations as a solid basis for strategic decision-making. The

visualization of pairwise comparison data in the sub-criteria section of Strengths - Opportunities (SO) is shown in Figure 6.



Figure 6. Pairwise Comparison result for sub-criteria (SO)
Source: bpmsg.com, 2024

In the SO (Strengths-Opportunities) sub-criteria analysis, SO1 ranks highest with 55.8%, prioritizing updating products to increase variety. SO3 follows with 32%, highlighting collaboration with contractors, while SO2 ranks third with 12.2%, focusing on expanding the market by distributing cement products. The consistency ratio is 1.9%, well below the 10% threshold, confirming the validity of these priorities as a solid basis for strategic decisions. The visualization of pairwise comparison data in the sub-criteria section of Weakness - Opportunities (WO) is shown in Figure 7.

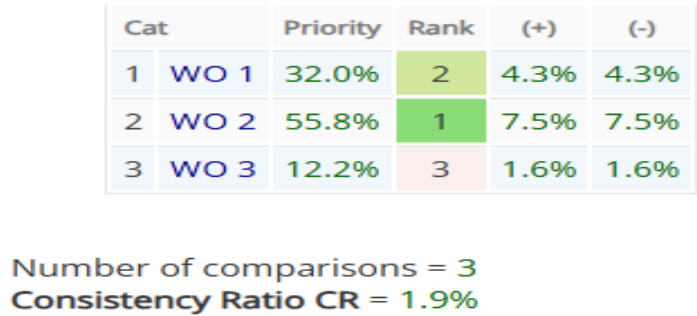


Figure 7. Pairwise Comparison result for sub-criteria (WO)
Source: bpmsg.com, 2024

Among the sub-criteria of WO (Weaknesses-Opportunities) priority analysis, WO2 achieves the first rank with a weight of 55.8%, reinforcing that leveraging e-commerce and social media platforms is crucial. The second rank is occupied by WO1, which weighs 32.0% and represents strategies seeking to enhance automation in inventory management. Lastly, WO3 (improve financial reporting) takes third place as the one with the least weight (12.2%). Results for the consistency ratio of 1.9% fall well below the acceptable limit of 10%. The visualization of pairwise comparison data in the sub-criteria section of Strengths - Threats (ST) is shown in Figure 8.

Cat		Priority	Rank	(+)	(-)
1	ST 1	33.3%	2	0.0%	0.0%
2	ST 2	66.7%	1	0.0%	0.0%

Number of comparisons = 1
Consistency Ratio CR = 0.0%

Figure 8. Pairwise Comparison result for sub-criteria (ST)

Source: bpmsg.com, 2024

In the priority analysis for the ST (Strengths-Threats) sub-criteria, ST2 holds the top rank with the highest weight of 66.7%, indicating its priority in adjusting the pricing strategy to counter price wars from competitors. The second rank is taken by ST1, which weights 33.3%, emphasizing the importance of enhancing in-store experience and service to differentiate from competitors. The analysis has a consistency ratio of 0.0%, well below the acceptable threshold of 10%. This perfect consistency ensures that the priority calculations are valid and can serve as a highly reliable basis for strategic decision-making. The visualization of pairwise comparison data in the sub-criteria section of Weakness - Threats (WT) is shown in Figure 9.

Cat		Priority	Rank	(+)	(-)
1	WT 1	66.7%	1	0.0%	0.0%
2	WT 2	33.3%	2	0.0%	0.0%

Number of comparisons = 1
Consistency Ratio CR = 0.0%

Figure 9. Pairwise Comparison result for sub-criteria (WT)

Source: bpmsg.com, 2024

In the priority analysis for the WT (Weaknesses-Threats) sub-criteria, WT1 holds the top rank with the highest weight of 66.7%, indicating its Priority in digitalizing processes to increase operational efficiency, reduce costs, and minimize risks from price wars. The second rank is taken by WT2, which weights 33.3%, making promotions and discounts for online customers. The analysis has a consistency ratio of 0.0%, well below the acceptable threshold of 10%. The Priority for criteria and sub-criteria where the results of calculating the local weight and global weight for each criterion and sub-criteria are as shown in Figure 10.

Decision Hierarchy			
Level 0	Level 1	Level 2	Gib Prio.
Business Solution (Sales Decline) AHP	SO 0.293 AHP	SO 1 0.558	16.3%
		SO 2 0.122	3.6%
		SO 3 0.320	9.4%
	WO 0.415 AHP	WO 1 0.320	13.3%
		WO 2 0.558	23.2%
		WO 3 0.122	5.1%
	ST 0.107 AHP	ST 1 0.333	3.6%
		ST 2 0.667	7.1%
	WT 0.185 AHP	WT 1 0.667	12.3%
		WT 2 0.333	6.2%

Figure 10. Weight Calculation for Criteria and Sub-Criteria

Source: bpmsg.com, 2024

Based on the pairwise comparison carried out by the owner of TB. Buyung Mas Putri, the global weights of each sub-criterion were determined. The most significant weight is owned by WO2 (Utilizing e-commerce and social media platforms), with a weight of 23.2%, followed by SO3 with a weight of 15.8%, and then WO1 with 13.3%. These are the top three sub-criteria with the highest global priority. Other sub-criteria, such as SO2 (8.7%), WT2 (6.2%), and WO3 (5.1%), have moderate weights. Sub-criteria ST1 (3.6%) are in the lower range, indicating less influence on the overall decision-making. The lowest global priority is held by SO1, which weighs 4.8%. Social media is an effective marketing channel for e-commerce platforms, boosting sales (Purnomo, 2023).

Discussion

This study concludes that the primary factors contributing to the significant sales decline at TB. Buyung Mas Putri is rooted in need for a digital presence, operational inefficiencies, and increasing competition from modern retailers. The lack of a functional e-commerce platform and limited social media engagement have prevented the business from adapting to the rapidly changing consumer landscape. The study applied a comprehensive set of analytical tools to systematically analyze these challenges, including the Kepner-Tregoe Analysis and the Fishbone Diagram. The Kepner-Tregoe method was instrumental in prioritizing the most critical issues, allowing the study to focus on actionable solutions with the most significant impact. Meanwhile, the Fishbone Diagram categorized the root causes into six distinct areas: People, Method, Machine, Measurement, Material, and Environment. By breaking down these root causes, it became evident that TB. Buyung Mas Putri's outdated operational processes, insufficient use of technology, and ineffective market positioning were key contributors to its declining competitiveness. In addition, modern retailers have capitalized on consumer preferences by offering more competitive pricing, faster service, and a broader product range, creating significant disadvantages for traditional businesses like TB. Buyung Mas Putri. This structured analysis underscores the need for a targeted and multi-dimensional approach to resolve the interconnected issues of declining sales, outdated systems, and the inability to compete

effectively in a digital market environment.

The findings further highlight that TB. Buyung Mas Putri faces a considerable challenge in adapting to digital transformation, which has fundamentally altered consumer behavior and market expectations. Today, over 60% of consumers prefer online shopping to traditional purchasing methods, a shift that has significantly reduced foot traffic to physical stores—however, TB. Buyung Mas Putri has yet to establish a robust e-commerce platform capable of attracting these digitally inclined consumers or competing with technology-driven competitors. Additionally, the absence of social media engagement has further limited the business's ability to expand its customer base or engage with existing customers effectively. Platforms like Instagram, Facebook, and e-commerce marketplaces have become essential tools for businesses to remain visible and relevant in the modern marketplace. Beyond its digital shortcomings, TB. Buyung Mas Putri struggles with operational inefficiencies, particularly in its manual inventory management system. Delays, inaccuracies, and errors in inventory control hinder the company's ability to meet customer demand efficiently, resulting in lost sales opportunities and diminished customer satisfaction. Compounding these issues, modern retailers have gained a competitive edge by offering features such as lower prices, faster delivery times, and a wider product selection, eroding traditional businesses' market share. Addressing these challenges requires an integrated approach that combines digital innovation, process optimization, and targeted customer engagement.

This study formulated strategic solutions using the SWOT/TOWS framework to address the identified challenges. The SWOT analysis revealed TB. Buyung Mas Putri's internal strengths and weaknesses and external opportunities and threats. The company's notable strengths include its strong relationships with loyal customers and its strategic store location, which remains an asset for local foot traffic. However, its weaknesses, such as technological limitations and operational inefficiencies, hinder its ability to compete effectively. Externally, the increasing preference for e-commerce and the growing demand for digital solutions present significant opportunities for the business to modernize its operations and capture new market segments. Conversely, threats such as heightened competition from modern retailers and shifting consumer dynamics further challenge the store's market position. The TOWS matrix extended the SWOT analysis by generating actionable strategies to address these findings. The proposed strategies include leveraging e-commerce platforms and social media to improve the store's digital visibility, automating inventory management systems to eliminate operational inefficiencies, enhancing the in-store customer experience to differentiate the business, and improving financial reporting processes to support data-driven decision-making. By aligning internal capabilities with external opportunities, these strategies aim to tackle TB. Buyung Mas Putri's key challenges position the business for growth.

The study applied the Analytical Hierarchy Process (AHP) to determine the most effective strategy. This structured decision-making tool prioritizes strategies based on their feasibility, impact, and alignment with business goals. The AHP analysis identified utilizing e-commerce and social media platforms as the top-priority strategy, with a global priority weight of 23.2%. This strategy offers the most significant potential to address the store's declining sales by tapping into the growing preference for online shopping and enhancing customer engagement through digital channels. Implementing this strategy involves building a user-friendly e-commerce platform that provides seamless shopping experiences for customers.

Simultaneously, optimizing social media engagement through consistent and attractive content can increase visibility, build stronger customer relationships, and drive online sales. Further steps include staff training to ensure employees can effectively use digital tools, promotional campaigns to attract and retain customers, and continuously establishing feedback mechanisms to improve the platform and customer satisfaction by integrating these elements, TB. Buyung Mas Putri can overcome its digital shortcomings, streamline operations, and remain competitive in a rapidly evolving market. This research underscores that digital transformation, operational optimization, and strategic adaptability are critical components for businesses to thrive in the face of increasing competition and changing consumer behaviors. These targeted strategies not only address the root causes of the store's challenges but also lay the foundation for long-term sustainable growth in the digital economy.

The findings of this study closely align with previous research emphasizing the importance of strategic decision-making and digital transformation in addressing challenges faced by SMEs. For example, Nisa (2024) demonstrated the effectiveness of the Analytical Hierarchy Process (AHP) in evaluating and prioritizing strategic decisions for material construction stores. This study reinforces those findings by successfully applying AHP to identify and rank strategies, with e-commerce and social media utilization emerging as the top priority for reversing sales decline at TB. Buyung Mas Putri. Similarly, Badi'ati and Zulistiani (2023) highlighted the utility of SWOT analysis in identifying internal strengths and weaknesses and external opportunities and threats. This research expands on their conclusions by integrating SWOT with the TOWS matrix, producing actionable strategies that address TB—Buyung Mas Putri's operational inefficiencies and external market pressures. The findings underscore the importance of aligning internal capabilities with external challenges to ensure feasible and impactful solutions. Fernando and Sarjono Putro (2023) emphasized the role of digital transformation in expanding traditional businesses through location optimization using multi-criteria analysis. This study complements their work by showcasing how tools like e-commerce platforms and social media can enhance market expansion and customer engagement. Unlike previous studies focusing primarily on digital adoption, this research introduces operational improvements, such as inventory automation, as a critical component for successful digital integration.

The findings of this study offer significant practical implications for TB. Buyung Mas Putri and similar traditional SMEs. First, prioritizing e-commerce and social media utilization as the most effective strategy provides a clear and actionable direction for regaining market competitiveness. By building a user-friendly e-commerce platform, the store can tap into the growing segment of consumers who prefer online shopping. Optimizing social media engagement through interactive and promotional content will further strengthen customer relationships and attract new markets. Second, automating inventory management is essential to improve operational efficiency. Implementing a digital inventory system reduces errors, enhances stock accuracy, and ensures timely product availability, addressing one of the key inefficiencies identified in the research. This step will also enable the store to respond faster to market demands and customer needs, improving overall satisfaction. Third, enhancing the in-store customer experience through professional staff training and improved service delivery can differentiate TB. Buyung Mas Putri from competitors. Training programs focusing on customer engagement and digital tool utilization will empower employees to provide seamless online and

offline experiences. Finally, improving financial reporting enables better decision-making by providing real-time insights into sales trends, inventory performance, and profitability. Accurate financial data ensures that the store can monitor the effectiveness of its strategies and make informed adjustments where necessary.

CONCLUSION

The research concludes that the primary factors contributing to the sales decline at TB. Buyung Mas Putri needs a presence that includes e-commerce platforms and social media engagement, operational inefficiencies, and increased competition from modern retailers. These findings were identified using comprehensive methods such as the Kepner-Tregoe Analysis and Fishbone Diagram. Strategies were developed based on the SWOT/TOWS framework to address these challenges. These include leveraging digital platforms like e-commerce and social media, automating inventory management, enhancing in-store experiences, and improving financial reporting. Among these, the Analytical Hierarchy Process (AHP) identified utilizing e-commerce and social media platforms as the most effective strategy, with a global priority weight of 23.2%. Implementing this strategy involves building a user-friendly e-commerce platform, optimizing social media engagement, conducting staff training, launching promotional campaigns, and establishing feedback mechanisms to ensure continual improvement. The study underscores integrating digital tools and streamlining TB's internal operations. Buyung Mas Putri to regain market competitiveness. These strategies address the root causes of sales decline and position the company for sustainable growth in the digital age. Recommendations for future research include conducting more detailed financial performance assessments and exploring consumer preferences to refine digital marketing strategies further.

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